

Schwartzman

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PAGE: 1

**RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/192,611**

DATE: 03/01/2000 3/1/00  
TIME: 12:43:34

### **INPUT SET: S34907.raw**

**This Raw Listing contains the General Information Section and up to the first 5 pages.**

**1** **SEQUENCE LISTING**

3 (1) General Information:

**ENTERED**

8 (ii) TITLE OF INVENTION: NF-AT-INTERACTING PROTEIN NIP45 AND METHODS  
9 OF USE THEREFOR

11 (iii) NUMBER OF SEQUENCES: 2

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: LAHIVE & COCKFIELD  
15 (B) STREET: 60 State Street, suite 510  
16 (C) CITY: Boston  
17 (D) STATE: Massachusetts  
18 (E) COUNTRY: USA  
19 (F) ZIP: 02109-1875

21 (v) COMPUTER READABLE FORM:

22 (A) MEDIUM TYPE: Floppy disk  
23 (B) COMPUTER: IBM PC compatible  
24 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
25 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25

27 (vi) CURRENT APPLICATION DATA:

28 (A) APPLICATION NUMBER: 09/192,611  
29 (B) FILING DATE:  
30 (C) CLASSIFICATION:

32 (vii) PRIOR APPLICATION DATA:

33 (A) APPLICATION NUMBER: US/08/755,584  
34 (B) FILING DATE:

36 (viii) ATTORNEY/AGENT INFORMATION:

37 (A) NAME: Giulio A. DeConti, Jr.  
38 (B) REGISTRATION NUMBER: 31,503  
39 (C) REFERENCE/DOCKET NUMBER: HUI-026

41 (ix) TELECOMMUNICATION INFORMATION:

42 (A) TELEPHONE: (617)227-7400  
43 (B) TELEFAX: (617)227-5941

46 (2) INFORMATION FOR SEO ID NO:1:

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47  
48       (i) SEQUENCE CHARACTERISTICS:  
49           (A) LENGTH: 1946 base pairs  
50           (B) TYPE: nucleic acid  
51           (C) STRANDEDNESS: single  
52           (D) TOPOLOGY: linear  
53  
54       (ii) MOLECULE TYPE: cDNA  
55  
56       (ix) FEATURE:  
57           (A) NAME/KEY: CDS  
58           (B) LOCATION: 13..1248  
59  
60  
61       (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:  
62  
63 ACAGTGTGGG AG ATG GCG GAA CCA CTG AGG GGA CGT GGT CCG AGG TCC           48  
64           Met Ala Glu Pro Leu Arg Gly Arg Gly Pro Arg Ser  
65           1                   5                   10  
66  
67 CGC GGT GGC CGA GGC GCT CGG AGA GCC CGA GGC GCC CGT GGC CGG TGT           96  
68           Arg Gly Gly Arg Gly Ala Arg Arg Ala Arg Gly Ala Arg Gly Arg Cys  
69           15               20                   25  
70  
71 CCT CGC GCC CGG CAG TCT CCG GCT AGG CTC ATT CCA GAC ACC GTG CTT           144  
72           Pro Arg Ala Arg Gln Ser Pro Ala Arg Leu Ile Pro Asp Thr Val Leu  
73           30               35                   40  
74  
75 GTG GAC TTG GTC AGT GAC AGC GAC GAA GAG GTC TTG GAA GTC GCA GAC           192  
76           Val Asp Leu Val Ser Asp Ser Asp Glu Glu Val Leu Glu Val Ala Asp  
77           45               50                   55                   60  
78  
79 CCA GTA GAG GTG CCG GTC GCC CGC CTC CCC GCG CCG GCT AAA CCT GAG           240  
80           Pro Val Glu Val Pro Val Ala Arg Leu Pro Ala Pro Ala Lys Pro Glu  
81           65               70                   75  
82  
83 CAG GAC AGC GAC AGT GAC AGT GAA GGG GCG GCC GAG GGG CCT GCG GGA           288  
84           Gln Asp Ser Asp Ser Asp Ser Glu Gly Ala Ala Glu Gly Pro Ala Gly  
85           80               85                   90  
86  
87 GCC CCG CGT ACA TTG GTG CGA CGG CGG CGG CGG CTG CTG GAT CCC           336  
88           Ala Pro Arg Thr Leu Val Arg Arg Arg Arg Arg Leu Leu Asp Pro  
89           95               100                   105  
90  
91 GGA GAG GCG CCG GTG GTC CCA GTG TAC TCC GGG AAG GTA CAG AGC AGC           384  
92           Gly Glu Ala Pro Val Val Pro Val Tyr Ser Gly Lys Val Gln Ser Ser  
93           110              115                   120  
94  
95 CTC AAC CTC ATT CCA GAT AAT TCA TCC CTC TTG AAA CTG TGC CCT TCA           432  
96           Leu Asn Leu Ile Pro Asp Asn Ser Ser Leu Leu Lys Leu Cys Pro Ser  
97           125              130                   135                   140  
98  
99 GAG CCT GAA GAT GAG GCA GAT CTG ACA AAT TCT GGC AGT TCT CCC TCT           480

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100	Glu Pro Glu Asp Glu Ala Asp Leu Thr Asn Ser Gly Ser Ser Pro Ser			
101	145	150	155	
102				
103	GAG GAT GAT GCC CTG CCT TCA GGT TCT CCC TGG AGA AAG AAG CTC AGA	528		
104	Glu Asp Asp Ala Leu Pro Ser Gly Ser Pro Trp Arg Lys Lys Leu Arg			
105	160	165	170	
106				
107	AAG AAG TGT GAG AAA GAA GAA AAG AAA ATG GAA GAG TTT CCG GAC CAG	576		
108	Lys Lys Cys Glu Lys Glu Lys Lys Met Glu Glu Phe Pro Asp Gln			
109	175	180	185	
110				
111	GAC ATC TCT CCT TTG CCC CAA CCT TCG TCA AGG AAC AAA AGC AGA AAG	624		
112	Asp Ile Ser Pro Leu Pro Gln Pro Ser Ser Arg Asn Lys Ser Arg Lys			
113	190	195	200	
114				
115	CAT ACG GAG GCG CTC CAG AAG CTA AGG GAA GTG AAC AAG CGT CTC CAA	672		
116	His Thr Glu Ala Leu Gln Lys Leu Arg Glu Val Asn Lys Arg Leu Gln			
117	205	210	215	220
118				
119	GAT CTC CGC TCC TGC CTG AGC CCC AAG CAG CAC CAG AGT CCA GCC CTT	720		
120	Asp Leu Arg Ser Cys Leu Ser Pro Lys Gln His Gln Ser Pro Ala Leu			
121	225	230	235	240
122				
123	CAG AGC ACA GAT GAT GAG GTG GTC CTA GTG GAA GGG CCT GTC TTG CCA	768		
124	Gln Ser Thr Asp Asp Glu Val Val Leu Val Glu Gly Pro Val Leu Pro			
125	240	245	250	255
126				
127	CAG AGC TCT CGA CTC TTT ACA CTC AAG ATC CGG TGC CGG GCT GAC CTA	816		
128	Gln Ser Ser Arg Leu Phe Thr Leu Lys Ile Arg Cys Arg Ala Asp Leu			
129	255	260	265	270
130				
131	GTG AGA CTG CCT GTC AGG ATG TCG GAG CCC CTT CAG AAT GTG GTG GAT	864		
132	Val Arg Leu Pro Val Arg Met Ser Glu Pro Leu Gln Asn Val Val Asp			
133	270	275	280	285
134				
135	CAC ATG GCC AAT CAT CTT GGG GTG TCT CCA AAC AGG ATT CTT TTG CTT	912		
136	His Met Ala Asn His Leu Gly Val Ser Pro Asn Arg Ile Leu Leu			
137	285	290	295	300
138				
139	TTT GGA GAG AGT GAA CTG TCT CCT ACT GCC ACC CCT AGT ACC CTA AAG	960		
140	Phe Gly Glu Ser Glu Leu Ser Pro Thr Ala Thr Pro Ser Thr Leu Lys			
141	305	310	315	320
142				
143	CTT GGA GTG GCT GAC ATC ATT GAT TGT GTG GTG CTA GCA AGC TCT TCA	1008		
144	Leu Gly Val Ala Asp Ile Ile Asp Cys Val Val Leu Ala Ser Ser Ser			
145	325	330	335	340
146				
147	GAG GCC ACA GAG ACA TCC CAG GAG CTC CGG CTC CGG GTG CAG GGG AAG	1056		
148	Glu Ala Thr Glu Thr Ser Gln Glu Leu Arg Leu Arg Val Gln Gly Lys			
149	335	340	345	350
150				
151	GAG AAA CAC CAG ATG TTG GAG ATC TCA CTG TCT CCT GAT TCT CCT CTT	1104		
152	Glu Lys His Gln Met Leu Glu Ile Ser Leu Ser Pro Asp Ser Pro Leu			

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153	350	355	360	
154				
155	AAG GTT CTC ATG TCA CAC TAT GAG GAA GCC ATG GGA CTC TCT GGA CAC			1152
156	Lys Val Leu Met Ser His Tyr Glu Glu Ala Met Gly Leu Ser Gly His			
157	365	370	375	380
158				
159	AAG CTC TCC TTC TTC TTT GAT GGG ACA AAG CTT TCA GGC AAG GAG CTG			1200
160	Lys Leu Ser Phe Phe Asp Gly Thr Lys Leu Ser Gly Lys Glu Leu			
161	385	390	395	
162				
163	CCA GCT GAT CTG GGC CTG GAA TCC GGA GAT CTC ATC GAA GTC TGG GGC			1248
164	Pro Ala Asp Leu Gly Leu Glu Ser Gly Asp Leu Ile Glu Val Trp Gly			
165	400	405	410	
166				
167	TGAAGCTCTC ACCCTGTTCG GACGCAAAGC CAAGACATGG AGACAATAGC TCCCAATT			1308
168				
169	ATTATTGTGA TTTTCGCCCT CATAAGGGCT AACAGAAACT GAATTAGAAC TTGTTTACT			1368
170				
171	ATTTATTTCT GGTGCTGGGG ATTGAACCCC AGACTATGCA CATGCTAAGG ATGTATGAAG			1428
172				
173	TGGAGGCAAA ACCAAGGCAT TACCTTTAGC CAGCCTCTAG TAGACTGTAG TGTCAAGCAA			1488
174				
175	GTGGCTACTT GGTAGTTGTG TGGCTCTGTG TATGTTGTG CTGTATTTGG CAGCCCCCTGG			1548
176				
177	GGCACATAGA AGGGACCTTG GCTTCCCTAC CATTTCACGT TCGCTGGTGC CCTTTCCCTTC			1608
178				
179	ATCAGATGAC TTCTGTGAAG CTGCCTATGT TGAGTGTGTT GAACTAAATG AGCTCTGCTT			1668
180				
181	TGGGTGTCCA GCCCTGGGGT TTGTGCCGCA GTTGGAGCCA GCAGTGACTT CACTCTGACT			1728
182				
183	TGGGACTGAG AATGCATTC CTGGTGGAGA CACTCGGGTG CAGAAATATA ACAGAAGGTG			1788
184				
185	ACATACATGC TGAAGCTGAG GACTAGGTAG AAAGTTAACG ACGTTGCATT TTCAGCCTTG			1848
186				
187	GGTATCCTCT CTGCCTGCCA GGACTCTAGC CAGTGTCTGG TACACACTTC TTGGCATGGA			1908
188				
189	CACCTAGGTC GACGCGGGCG CGATTCGGCC GACTCGAG			1946
190				
191				
192	(2) INFORMATION FOR SEQ ID NO:2:			
193				
194	(i) SEQUENCE CHARACTERISTICS:			
195	(A) LENGTH: 412 amino acids			
196	(B) TYPE: amino acid			
197	(D) TOPOLOGY: linear			
198				
199	(ii) MOLECULE TYPE: protein			
200				
201	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:			
202				
203	Met Ala Glu Pro Leu Arg Gly Arg Gly Pro Arg Ser Arg Gly Gly Arg			
204	1	5	10	15
205				

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206 Gly Ala Arg Arg Ala Arg Gly Ala Arg Gly Arg Cys Pro Arg Ala Arg  
207 20 25 30  
208  
209 Gln Ser Pro Ala Arg Leu Ile Pro Asp Thr Val Leu Val Asp Leu Val  
210 35 40 45  
211  
212 Ser Asp Ser Asp Glu Glu Val Leu Glu Val Ala Asp Pro Val Glu Val  
213 50 55 60  
214  
215 Pro Val Ala Arg Leu Pro Ala Pro Ala Lys Pro Glu Gln Asp Ser Asp  
216 65 70 75 80  
217  
218 Ser Asp Ser Glu Gly Ala Ala Glu Gly Pro Ala Gly Ala Pro Arg Thr  
219 85 90 95  
220  
221 Leu Val Arg Arg Arg Arg Arg Leu Leu Asp Pro Gly Glu Ala Pro  
222 100 105 110  
223  
224 Val Val Pro Val Tyr Ser Gly Lys Val Gln Ser Ser Leu Asn Leu Ile  
225 115 120 125  
226  
227 Pro Asp Asn Ser Ser Leu Leu Lys Leu Cys Pro Ser Glu Pro Glu Asp  
228 130 135 140  
229  
230 Glu Ala Asp Leu Thr Asn Ser Gly Ser Ser Pro Ser Glu Asp Asp Ala  
231 145 150 155 160  
232  
233 Leu Pro Ser Gly Ser Pro Trp Arg Lys Lys Leu Arg Lys Lys Cys Glu  
234 165 170 175  
235  
236 Lys Glu Glu Lys Lys Met Glu Glu Phe Pro Asp Gln Asp Ile Ser Pro  
237 180 185 190  
238  
239 Leu Pro Gln Pro Ser Ser Arg Asn Lys Ser Arg Lys His Thr Glu Ala  
240 195 200 205  
241  
242 Leu Gln Lys Leu Arg Glu Val Asn Lys Arg Leu Gln Asp Leu Arg Ser  
243 210 215 220  
244  
245 Cys Leu Ser Pro Lys Gln His Gln Ser Pro Ala Leu Gln Ser Thr Asp  
246 225 230 235 240  
247  
248 Asp Glu Val Val Leu Val Glu Gly Pro Val Leu Pro Gln Ser Ser Arg  
249 245 250 255  
250  
251 Leu Phe Thr Leu Lys Ile Arg Cys Arg Ala Asp Leu Val Arg Leu Pro  
252 260 265 270  
253  
254 Val Arg Met Ser Glu Pro Leu Gln Asn Val Val Asp His Met Ala Asn  
255 275 280 285  
256  
257 His Leu Gly Val Ser Pro Asn Arg Ile Leu Leu Leu Phe Gly Glu Ser  
258 290 295 300

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Original Text